

QA: QA

**U. S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
OFFICE OF QUALITY ASSURANCE**

**AUDIT REPORT BSC-ARC-02-03
OF THE
BECHTEL SAIC COMPANY, LLC
AT
YUCCA MOUNTAIN SITE, NEVADA**

DECEMBER 10 - 13, 2001

Prepared by: _____ **Date:** _____
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Acting Director
Office of Quality Assurance

1.0 EXECUTIVE SUMMARY

As a result of Quality Assurance (QA) compliance-based audit BSC-ARC-02-03, the audit team determined that, with the exception of those areas where conditions adverse to quality were identified, the Bechtel SAIC Company, LLC (BSC) at the Yucca Mountain Site (YMS) are satisfactorily and effectively implementing the U.S. Department of Energy (DOE), Office of Civilian Radioactive Waste Management (OCRWM), DOE/RW-0333P, Revision 10, *Quality Assurance Requirements and Description* (QARD), and applicable implementing procedures.

QA Program Sections audited were determined to be effectively implemented based on activities evaluated. Appendix C of the QARD, in the area of "Expert Elicitation," was identified as not being implemented within the past year. All sections audited were evaluated as being effectively implemented.

The audit team identified several conditions adverse to quality during the audit that resulted in the issuance of three Deficiency Reports (DRs). These conditions adverse to quality are described in Section 5.5.

DR BSC-02-D-047 identifies several delegation of authority documents that were incorrectly classified as QA: N/A exclusionary records.

DR BSC-02-D-054 identifies that expedited change notice ECN 1 to NWI-ESF-049Q was not issued within the 90 calendar day requirement established in AP-5.1Q, Revision 2, ICN 0, *Plan and Procedure Preparation, Review, and Approval*.

DR BSC-02-D-057 identifies: (1) that self-assessment reports containing QARD related activities have not been correctly designated as QA records; (2) that the documents reviewed during the assessment have not been detailed in the resulting report; and, (3) that recommendations included in the report have not been entered into Condition/Issue Identification and Reporting/Resolution System (CIRS) database.

In addition to the above, the audit team identified four conditions adverse to quality requiring only remedial action that were corrected during the audit (CDA).

CDA #1 identified a document format problem in Field Work Package FWP-ESF-96-004, Revision 6 that was corrected by the issuance of FWP-ESF-96-004, Revision 7.

CDA #2 identified a problem with the assignment of calibration due dates for two Total Station Distance Meters used by the Survey Group. Calibration stickers were corrected and replaced and related documentation was corrected and applicable records supplemented during the audit.

CDA #3 identified an instance of missing information in a Sample Request form controlled by YAP-SII.4Q, Revision 2, ICN 1, BSCN 1, *Collection, Submission, and Documentation of Non-core and Non-cutting Samples to the Sample Management Facility for Site Characterization*. The Sample Management Facility (SMF) personnel corrected the form during the audit and supplemented the applicable record.

CDA #4 identified that the Chief of Survey had not finalized the Supplement V checklist required by AP-SV.1Q, Revision 0, ICN 2, *Control of Electronic Management of Information*. The checklist was completed and submitted to records during the audit.

The audit team also evaluated the effectiveness of corrective actions related to 12 previously closed DRs. Overall the results of these reviews revealed that the committed corrective actions were effective to prevent recurrence. These results are described in Section 5.5.5.

There is one recommendation for improvement, which is detailed in Section 6.0 of this report.

2.0 SCOPE

Auditors representing the DOE Office of Quality Assurance (OQA) conducted a compliance-based audit to assess, through interviews with cognizant personnel, reviews of documentation and evaluation of procedures, the adequacy and effectiveness of BSC YMP implementation of the OCRWM QA Program, as described in the QARD and implementing procedures.

The audit team also reviewed 12 OCRWM deficiency documents that were closed since the last compliance-based audit to evaluate the effectiveness of completed corrective actions by BSC.

In accordance with the approved audit plan, the following QA Program Sections were evaluated.

- | | |
|------|---|
| 1.0 | Organization |
| 2.0 | Quality Assurance Program |
| 3.0 | Design Control |
| 4.0 | Procurement Document Control |
| 5.0 | Implementing Documents |
| 6.0 | Document Control |
| 7.0 | Control of Purchased Items and Services |
| 8.0 | Identification and Control of Items |
| 9.0 | Control of Special Processes |
| 10.0 | Inspection |
| 12.0 | Control of Measuring and Test Equipment |
| 13.0 | Handling, Storage, and Shipping |

14.0	Inspection, Test and Operating Status
15.0	Nonconformances
16.0	Corrective Action
17.0	Quality Assurance Records
Supplement I	Software
Supplement II	Sample Control
Supplement III	Scientific Investigation
Supplement IV	Field Surveying
Supplement V	Control of the Electronic Management of Data
Appendix C	Monitored Geologic Repository

3.0 AUDIT TEAM AND OBSERVERS

The following is a list of audit team members and assigned areas of responsibility:

<u>Name/Title/Organization</u>	<u>QA Program Sections</u>
Victor J. Barish, Jr, Audit Team Leader, Navarro Quality Services (NQS)	3.0, 12.0, 16.0, Supplement IV
Samuel E. Archuleta, Auditor, NQS	5.0, 6.0, Supplements I and V
Christian M. Palay, Auditor, NQS	12.0, Supplements II and III
Dennis C. Threatt, Auditor, NQS	2.0, 10.0, 14.0, 17.0, Appendix C
Lester W. Wagner, Auditor, NQS	1.0, 4.0, 7.0, 8.0, 9.0, 13.0, 15.0

There were no observers in attendance during the conduct of this audit.

4.0 AUDIT TEAM MEETINGS AND PERSONNEL CONTACTED

The pre-audit meeting was held on December 10, 2001 at BSC YMS offices in Area 25 with attendance in Las Vegas via teleconference. The Audit Team Leader held daily audit team meetings to discuss the progress of the audit. The Audit Team Leader also held daily management meetings to advise BSC management and staff of the audit progress, including potential conditions adverse to quality. The audit was concluded with a post-audit meeting held on December 13, 2001 at BSC YMS offices in Area 25 with attendance in Las Vegas via teleconference.

Personnel contacted during the audit, including those who attended the pre-and post-audit meetings, are listed in Attachment 1, "Personnel Contacted During the Audit."

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Effectiveness

The audit team concluded that, with the exception of those areas where conditions adverse to quality were identified, the BSC YMS is satisfactorily and effectively implementing the examined sections of the QARD and applicable implementing

procedures. The results for each program section evaluated are contained in Attachment 2, "Summary Table of Audit Results."

5.2 Stop Work or Immediate Corrective Actions Taken

There were no stop work orders or immediate corrective actions as a result of the audit.

5.3 Audit Activities

Attachment 2, "Summary Table of Audit Results" provides the results for each QA Program Section audited. Details of audit activities, including objective evidence reviewed, are documented in the audit checklist. The checklist is administered as a QA record in accordance with QA Procedure QAP-18.2, Revision 8, *Internal Audit Program*.

5.4 Technical Audit Activities

An audit of technical activities was not included in the scope of the audit.

5.5 Summary of Deficiencies

The audit team identified several conditions adverse to quality during the audit from which three DRs have been issued. Four conditions adverse to quality were identified and corrected during the audit. Details of the DRs and CDAs are provided in Sections 5.5.2 and 5.5.4 respectively.

5.5.1 Corrective Action Reports

There were no corrective action reports issued as a result of this audit.

5.5.2 Deficiency Reports

DR BSC-02-D-047. LP-1.0Q-M&O, Revision 0, ICN 0, *Organization*, Section 6.1, "QA Records," designates documented delegations of authority as QA records.

Contrary to the above, delegation of authority e-mail documents were incorrectly classified as QA: N/A exclusionary records.

DR BSC-02-D-054. AP-5.1Q, Section 5.6.7b) requires that a revision or ICN be issued within 90 calendar days of approval of an expedited change notice to a procedure.

Contrary to the above, ECN 1 to NWI-ESF-049Q, Revision 0, ICN N/A, *Steel Set Jacking/Expansion*, was not issued within 90 calendar days of approval.

DR BSC-02-D-057. AP-2.20Q, Revision 0, ICN 1, *Self-Assessments*, Section 6.1 requires that self-assessment reports related to QARD work activities be classified as QA records; Attachment 2, Section 8, requires that documents reviewed be included in the details of the report; and, Section 5.4.3b) requires that conditions and recommendations identified by the self-assessment team be entered into the CIRS.

Contrary to the above, self-assessment report SA-SSFD-2001-010 included an assessment of QARD related work activities but was classified as QA: N/A; the documents reviewed during the assessment were not detailed in the report; and, a recommendation included in the report was not entered into the CIRS database.

5.5.3 Deficiency Identification and Referrals (DIR)

There were no DIRs issued as a result of this audit.

During the audit, however, the audit team stated that the deficient condition currently documented in DR BSC-02-D-054 would be referred to DR OCRWM-02-D-007. Subsequent to the audit it was determined that all corrective actions required to close DR OCRWM-02-D-007 had been completed. Therefore, DR BSC-02-D-054 was initiated to document the deficient condition related to BSC's failure to issue ECN 1 changes to NWI-ESF-049Q within 90 calendar days of approval.

5.5.4 Deficiencies Corrected During the Audit

The following CDAs were identified and corrected during the audit:

CDA # 1. Contrary to AP-5.2Q, Revision 0, ICN 2, ECN 1, *Testing Work Packages*, FWP-ESF-96-004, Rev. 6 did not include the format section 3.2, Contingency Plans. FWP-ESF-96-004, Rev. 7 was issued during the audit to correct the oversight. This was an isolated condition requiring only remedial action.

CDA # 2. Contrary to AP-12.1Q, Revision 0, ICN 1, *Control of Measuring and Test Equipment and Calibration Standards*, the calibration due dates for two survey equipment were determined from the acceptance date of the calibration rather than from the actual calibration date. Stickers, calibration documentation, and usage records were corrected

during the audit. The Survey Group only has three active equipment requiring calibration. There were no other instances of this condition identified in the three other BSC YMS departments audited.

CDA # 3. Contrary to YAP-SII.4Q, one of 51 documents reviewed was missing some required information. SMF personnel corrected the document during the audit and supplemented the applicable record. This was an isolated condition requiring only remedial action.

CDA # 4. Contrary to AP-SV.1Q, the Chief of Survey did not complete the checklist which documented the review of QARD Supplement V controls. The checklist was completed during the audit. All required controls are adequately addressed in the survey procedures that control the process. This was an isolated condition requiring only remedial action.

5.5.5 Follow up of Previously Identified Conditions Adverse to Quality

DR BSC-01-D-052. BSC position descriptions developed for project personnel performing design and software development and verification do not establish descriptions of the duties and responsibilities for the position they occupy. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-059. Multiple deficiencies in scientific notebooks were identified in self-assessment report SA-ART-2000-006 for which no deficiency document was initiated in accordance with AP-16.1Q. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-081. Steel set lagging was installed between Alcove #1 and Alcove #2 in the Exploratory Studies Facility Main Loop without a controlled implementing document. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-092. Field Engineering impact reviews were not performed for Revisions 2 and 3 to nonconformance report YMSCO-98-0044. No additional occurrences of this condition were identified during the audit.

DR YMSCO-01-D-101. The management processes described in Section 5.0 of procedure AP-SIII.6Q did not provide the detail required to achieve and/or comply with the purpose of the procedure described in Section 1.0. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-072. Water samples designated as having been taken from Well J-13 were actually a combination of Well J-13 and Well J-12 or totally from Well J-12. Samples were taken from a tank fed by both Well J-13 and Well J-12 water rather than from the source. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-036. Hardcopy or electronic media notification of changed requirements/implementing documents was not provided to organizations performing work until after the effective date of the change. No additional occurrences of this condition were identified during the audit.

DR LVMO-01-D-013. Outdated procedure was used for quality affecting work. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-112. Measuring & Test Equipment was released for use prior to the completion of the Acceptance Report required by AP-7.7Q. No additional occurrences of this condition were identified during the audit.

DR LVMO-01-D-026. Field Work Package records were not submitted within the time limits prescribed by AP-17.1Q. No additional occurrences of this condition were identified during the audit.

DR LVMO-01-D-034. Field Work Package records were not submitted within the time limits prescribed by AP-17.1Q. No additional occurrences of this condition were identified during the audit.

DR BSC-01-D-096. Scientific Notebooks and Scientific Notebook attachments did not document cross-reference annotations as required by AP-SIII.1Q, and supplemental record packages were not identified in the scientific notebook table of contents. Due to availability, only two Scientific Notebooks were reviewed during this audit. Neither of the samples had attachments or supplemental records, therefore the actions to preclude recurrence for this DR could not be verified. Verification of the corrective action for this DR will be performed during the remaining compliance-based audits conducted during this fiscal year.

6.0 RECOMMENDATIONS

The following recommendation resulted from the audit and is presented for consideration by the BSC management:

AP-SIII.1Q should be revised to enhance the requirements related to the documentation of the technical review of data. Currently, the procedure requires that the Technical Reviewer verify that an AP-2.14Q or other procedure review of the data has been performed. DR BSC-02-D-009 addresses the lack of technical reviews of data and may address this recommendation during the during the corrective action process.

7.0 LIST OF ATTACHMENTS

Attachment 1 “Personnel Contacted During the Audit”

Attachment 2 “Summary Table of Audit Results”

Attachment 3 “Acronyms/Abbreviations”

ATTACHMENT 1
Personnel Contacted During the Audit

Name	Organization	Pre-audit Meeting	Contacted During Audit	Post-audit Meeting
Abernathy, Larry G.	BSC/Quality Assurance	X		X
Andrews, Robert W.	BSC/Performance Assessment Project Manager	X		
Bartlett, John W.	BSC/Welding Services		X	
Bastian, C. Thomas	BSC/Radiation Programs		X	
Bates, Gregory L.	BSC/Site Services & Field Support Chief Surveyor		X	
Beall, George K.	BSC/Audit Coordinator	X	X	X
Boldt, Gerald K.	BSC/Methods and Procedures Manager	X		X
Boutin, Robert J.	BSC/Facility Design	X		X
Cereghino, Steven J.	BSC/License Application Manager	X		
Cornell, Veronica	BSC/Parallax Inc/Science and Postclosure Performance Team	X		X
Cox, Howard R.	BSC/Site Quality Control		X	
Cozzolino, Daniel T.	BSC/Site Services & Field Support Construction M&TE Custodian		X	
Croft, Larry D.	BSC/ES&H Information Analysis & Management	X		X
Crumpacker, Gary L.	BSC/Title III Design		X	
Daily, William D.	BSC/LLNL Principal Investigator		X	
Dana, Stephen R.	BSC/Quality Engineering			X
Darnell, Sounia K.	BSC/Projects Technical Assistant	X		
Davis, Dwayne D.	BSC/Site Services & Field Support		X	
Devers, John K.	BSC/Quality Control		X	
Dresel, Ralph R.	BSC/Site Services & Field Support Management	X	X	X
Drummond, Christine L.	BSC/Human Resources & Training		X	
El-Madani, Debra	BSC/Media/Email		X	
Fagg, Rennae K.	BSC/Work Planning And Control		X	
Fenster, Richard A.	BSC/LANL TCO Data Processing Technician		X	
Ferrerio, Gloria M.	BSC/Human Resources & Training		X	
Fitch, Edward F.	BSC/Staff Engineering		X	
Fransioli, Paul M.	BSC/Radiation Programs Senior Environmental Scientist		X	X
Fray, Russell E.	BSC/Projects Deputy		X	X
Garrett, Charles R.	BSC/Title III Design Supervisor	X	X	
Gilkerson, Kenneth O.	BSC/Quality Assurance	X		X

Name	Organization	Pre-audit Meeting	Contacted During Audit	Post-audit Meeting
Griffith, Rhonda J.	BSC/Work Planning & Control		X	
Habbe, Robert D.	BSC/Supplier Quality		X	
Harris-Womack, Sharon D.	BSC/RPC Technical Lead		X	
Henning, Roger J.	BSC/Science and Engineering Testing			X
Homuth, Emil F.	BSC/LANL TCO Data Manager		X	
Horton, Sam H.	BSC/Quality Assurance Special Assignments	X		
Howe, Bonnie J.	BSC/Document Control		X	
Hudy, Edythe	BSC/Document Control		X	
Humphries-Alder, Cynthia	BSC/Quality Engineering		X	X
Johnson, Martha J.	BSC/Millican & Assoc. Records Management and Document Control Manager			X
Johnson, Rudolph L.	BSC/Staff Engineering		X	
Johnson, William H.	BSC/Quality Control Inspector		X	
Jones, Gary W.	BSC/Radiation Programs Senior Environmental Scientist		X	
Krank, Kevin C.	BSC/Suspect Counterfeit Parts		X	X
Krishna, Donald T.	BSC/Manager of Quality Assurance			X
Lawson, Debbie A.	BSC/Document Clerk		X	
Lewis, Christopher C.	BSC/Sample Management Facility Manager	X	X	X
Lewis, Terry W.	BSC/Field Procurement		X	
Martin, John S.	BSC/Site Quality Manager	X	X	X
McDaniel, Mary G.	BSC/Technical Process Manager	X		X
McFall, Kenneth T.	BSC/Site Quality Control	X		X
McGonigle, Brenda L.	BSC/SMF Administrative Staff		X	
McGrath, Lawrence W.	BSC/Procurement Engineer		X	
Mitchell, Alan J.	BSC/ESF Underground Test Lead		X	
Moran, Timothy M.	BSC/Radiation Programs Environmental Specialist		X	
Morrison, Lawrence R.	BSC/ESF Design Manager	X		X
Myatt, Anthony R.	BSC/Work Planning and Control		X	
Neff, Heidi	BSC/Document Control Representative		X	
Neubauer, Daniel P.	BSC/Engineer		X	
Newman, Bryan O.	BSC/Field Construction Engineering		X	
Noel, Richard L.	BSC/Quality Control		X	
Osborne, Charles D.	BSC/Site Quality Control Supervisor	X	X	
Peters, Mark T.	BSC/Testing Project Manager	X		
Peterson, Thomas A.	BSC/Manager Site Operations	X		X

Name	Organization	Pre-audit Meeting	Contacted During Audit	Post-audit Meeting
Pitterle, Michael P.	BSC/SMF Geologist	X	X	
Powe, Richard E.	BSC/Quality Engineering	X		X
Prater, Michele	BSC/Document Control Supervisor	X	X	
Reinert, Bruce D.	BSC/LANL/TCO Staff	X		X
Roesner, Kent W.	BSC/Regional Data M&TE Custodian		X	
Rupp, Trudy	BSC/Site Services & Field Support Administrative Services		X	
Schulenburg, Kenneth L.	BSC/Field Construction Engineering		X	
Scroggins, Claude G.	BSC/SMF Staff		X	
Skorsest, Robert A.	BSC/Title III Design		X	
Sorensen, C. D.	BSC/Environmental Safety and Health Manager			X
Sparks, Charles M.	BSC/Site Services & Field Support Management	X	X	X
Spencer, Robert E.	BSC/SMF M&TE Custodian		X	
Swenning, Steven H.	BSC/Chief Science Officer Senior Staff	X		
Turner, Paul E.	BSC/Human Resources & Training		X	
Warren, Charles C.	BSC/Quality Engineering @ LLNL		X	X
Weeks, Richard L.	BSC/Site Quality Assurance	X		X
Wetzel, Judy A.	BSC/Document Control & Records	X	X	
Whitcraft, James S.	BSC/Manager of Engineering	X		X
White, Lesley H.	BSC/Warehouse Services		X	
Williams, Albert C.	DOE/OQA General Engineer	X		
Williams, E. K.	BSC/Site Quality Control Engineering	X	X	
Williams, Nancy H.	BSC/Manager of Projects	X		
Wolverton, Ken M.	BSC/Regional Data Analysis		X	X
Zinkevich, Fred N.	BSC/Senior Engineer	X		X

ATTACHMENT 2 SUMMARY TABLE OF AUDIT RESULTS

QARD Sections	Implementing Documents	Checklist Pages	DR	REC	Program Adequacy	Procedure Compliance	Overall
1.0	LP-1.0Q-M&O	1-2	BSC-02-D-047		SAT	SAT	SAT
2.0	AP-2.1Q AP-2.2Q AP-2.19Q AP-2.20Q	3-8 9-10 11-13 14-18	BSC-02-D-057		SAT	SAT	SAT
3.0	AP-3.4Q AP-3.19Q AP-3.24Q LP-3.22Q-M&O LP-CON-002Q-BSC NLP-3-29 YAP-3.7Q	20-22 23-24 25-26 27-28 29-30 31-32 33-34			SAT	SAT	SAT
4.0	Incorporated into Section 7.0	35			SAT	SAT	SAT
5.0	AP-5.1Q AP-5.2Q	36-38 39-40	BSC-02-D-054 CDA #1		SAT	SAT	SAT
6.0	AP-6.1Q AP-6.28Q	41-43 44			SAT	SAT	SAT
7.0	AP-7.6Q AP-7.4Q AP-7.5Q AP-7.7Q	45 46-48 49-51 52-54			SAT	SAT	SAT
8.0	Incorporated into Section 13.0	55			SAT	SAT	SAT
9.0	NWI-ESF-026Q NWI-ESF-027Q NWI-ESF-028Q NWI-ESF-029Q	56-59 60 61-63 64-65			SAT	SAT	SAT
10.0	AP-10.1Q AP-10.2Q AP-10.3Q AP-10.4Q	66-71 72-77 78-82 83-85			SAT	SAT	SAT
12.0	AP-12.1Q LP-OM-039Q-BSC LP-CAL-003Q-BSC	86-92, 99-105, 109-114, 119-125 93-94 95-96	CDA #2		SAT	SAT	SAT

QARD Sections	Implementing Documents	Checklist Pages	DR	REC	Program Adequacy	Procedure Compliance	Overall
	LP-CAL-002Q-BSC LP-OM-037Q-BSC LP-OM-036Q-BSC LP-CAL-004Q-BSC LP-MM-001Q-M&O LP-MM-002Q-M&O LP-SMF-007Q	97-98 106-107 108 115-116 117 118 126-128					
13.0	LP-CON-006Q2-BSC NWI-ESF-0038Q	129-130 131-133			SAT	SAT	SAT
14.0	AP-2.23Q	134-136			SAT	SAT	SAT
15.0	AP-15.2Q	137-140			SAT	SAT	SAT
16.0	AP-16.1Q	141-142			SAT	SAT	SAT
17.0	AP-17.1Q	142-1 – 142-2			SAT	SAT	SAT
Supp. I	AP-SI.1Q	143-145			SAT	SAT	SAT
Supp. II	YAP-SII.1Q YAP-SII.2Q YAP-SII.4Q LP-SMF-002Q-M&O NWI-SMF-001Q NWI-SMF-002Q NWI-SMF-003Q NWI-DS-002Q NWI-DS-004Q	146-147 148 149-151 152-158 159-162 163-165 166 167-169 170-171	CDA #3		SAT	SAT	SAT
Supp. III	AP-SIII.1Q AP-SIII.3Q	172-183 184-188		REC #1	SAT	SAT	SAT
Supp. IV	LP-OM-038Q-BSC LP-OM-035Q-BSC	189-190 191-192			SAT	SAT	SAT
Supp. V	AP-SV.1Q	193-195	CDA #4		SAT	SAT	SAT
Appendix C	Incorporated into sections 2.0, 4.0, 7.0, 9.0, 10.0, & 15.0	NA	NA	NA	SAT	SAT	SAT

Legend: CDA = Corrected During Audit DR = Deficiency Report NA = Not Applicable REC = Recommendation SAT = Satisfactory

ATTACHMENT 3

ACRONYMS/ABBREVIATIONS

BSC	Bechtel SAIC Company, LLC
CDA	Corrected During the Audit
CIRS	Condition/Issue Identification and Reporting/Resolution System
DIR	Deficiency Identification and Referral
DOE	U.S Department of Energy
DR	Deficiency Report
ECN	Expedited Change Notice
ESF	Exploratory Studies Facility
FWP	Field Work Package
N/A	Not applicable
NQS	Navarro Quality Services
QA	Quality Assurance
QARD	Quality Assurance Requirements and Description
OCRWM	Office of Civilian Radioactive Waste Management
OQA	Office of Quality Assurance
SMF	Sample Management Facility
YMS	Yucca Mountain Site